Receipt date: 07/24/2006

07-25-06

(2003-052(PCT/US)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Daniel M. Giáquinta et al. International Application/No. PCT/US2004/026847 Serial No. 10/568.516\*

Confirmation No. 1180 Filed February 15, 2006

International Filing Date June 18, 2004 Priority Date Claimed June 18, 2003

For PLATINUM-COPPER FUEL CELL CATALYST

July 24, 2006

TO THE COMMISSIONER FOR PATENTS. SIR

## INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the aboveentitled application and to be made of record therein.

Applicants submit herewith copies of the foreign patent documents and/or literature references. Some of the attached Japanese references include English abstracts. Applicants do not make any representation as to the accuracy of the additional information.

The Commissioner is hereby authorized to charge to Deposit Account No. 19-1345 an amount sufficient to cover the fee specified in 37 C.F.R. §1.17(p) for submission of this Information Disclosure Statement, should a fee be required.

Respectfully submitted,

07/26/2006 HDESTA1 00000047 191345 10568516

01 FC:1806 180.00 DA

Derick E. Allen , Reg. No. 43,468 SENNIGER POWERS

One Metropolitan Square, 16th Floor

St. Louis, Missouri 63102

(314) 231-5400

DEA/Irw NSIDERED EXCEPT WHERE LINED THROUGH. /A.P./ Receipt date: 0/7/24/2006 10568516 - GAU: 4181 PTO/SB/08A Complete if Known Application Number 10/568,516 INFORMATION DISCHOSURE STATEMENT BY APPLICANT 02-15-2006 Filing Date Confirmation Number 1180 First Named Inventor Daniel M. Giaquinta (use as many sheets as necessary) Group Art Unit **Examiner Name** Not Yet Assigned Sheet 1 of 5 Attorney Docket No. HNDA 2023, 1 (2003-052)

		U.S.	PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	U.S. Patent Docum	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	1	3,701,687		Grubb et al.	10-31-1972
	2	3,711,385		Beer et al.	01-16-1973
	3	4,061,495	Α	Selman et al.	12-06-1977
	4	4,186,110		Jalan et al.	01-29-1980
	5	4,192,907		Jalan et al.	03-11-1980
	6	4,261,742	Α	Coupland et al.	04-14-1981
	7	4,677,035	Α	Fiedler et al.	06-30-1987
	8	4,683,119		Selman et al.	07-28-1987
	9	4,707,229		Dempsey et al.	11-17-1987
	10	4,716,087		Ito et al.	12-29-1987
	11	4,737,205		Selman et al.	04-12-1988
-	12	4,781,803		Harris et al.	11-01-1988
	13	4,812,434		Pohlmann et al.	03-14-1989
	14	4,885,216	Α	Naik	12-05-1989
	15	4,885,376		Verkade	12-05-1989
	16	4,954,474		Tsurmi et al.	09-04-1990
	17	4,970,128		Itoh et al.	11-13-1990
	18	4,985,386		Tsurumi et al.	01-15-1991
	19	5,024,905		Itoh et al.	06-18-1991
	20	5,068,161		Keck et al.	11-26-1991
	21	5,077,141	Α	Subhash K. Naik et al.	12-31-1991
	22	5,079,107		Jalan	01-07-1992
	23	5,096,866		Itoh et al.	03-17-1992
	24	5,126,216		Capuano et al.	06-30-1992
	25	5,178,971		Itoh et al.	01-12-1993
	26	5,189,005		Watanabe et al.	02-23-1993

Examiner		Date	
Signature	/Alexander P  þlyansky/ (08/05/2009)	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Applicant is to place a check mark here if English Translation is attached or place an "A" here if English language abstract is attached.

10568516 - GAU: 4181 Receipt date: 07/24/2006 PTO/SB/08A Complete if Known Application Number 10/568.516 INFORMATION DISCLOSURE Filing Date 02-15-2006 STATEMENT BY APPLICANT Confirmation Number 1180 First Named Inventor Daniel M. Giaquinta (use as many sheets as necessary) Group Art Unit Examiner Name Not Yet Assigned Sheet 2 of Attorney Docket No. HNDA 2023, 1 (2003-052)5,225,391 Stonehart et al. 07-06-1993 27 5.246,791 09-21-1993 Fisher et al. 28 5 516 381 Hisataka Kawai et al 05-14-1996 29 Α 5,593,934 Stonehart 01-14-1997 30 Fukui et al. 5.635.439 06-03-1997 31 5,773,162 Surampudi et al. 06-30-1998 32 5.876.867 Itoh et al. 03-02-1999 33 34 5.939.220 Gunner et al 08-17-1999 35 6.036.791 Α Mitsuhashi et al. 03-14-2000 6.045.671 Wuetal 04-04-2000 36 6.048.633 Fuii et al. 04-11-2000 37 6.127.058 Pratt et al. 10-03-2000 38 6,171,721 Narayanan et al. 01-09-2001 39 6.183.894 Adzic et al. 02-06-2001 40 6.187,164 Warren et al. 02-13-2001 41 B<sub>1</sub> Shinkai et al. 6.187.468 B1 02-13-2001 42 6.225.011 B1 Gotoh et al. 05-01-2001 43 6.268.077 R1 Kellev et al. 07-31-2001 44 45 6,294,280 **B**1 Tanaka et al. 09-25-2001 46 6.322.643 R1 Mitsuhashi et al. 11-27-2001 6.458 741 B1 Roark et al. 10-01-2002 47 48 6.632.299 B1 Harris 10-14-2003 6.730.350 Finkelshtain et al. 05-04-2004 B2 49 2002/0004453 Α1 Katori et al. 01-10-2002 50 Terazono et al. 2002/0009626 A1 01-24-2002 51 2002/014103 Α1 Ruettinger et al. 10-10-2002 52 2003/0008196 A1 Wessel et al. 01-09-2003 53 2003/0045425 A1 Ruth et al. 03-06-2003 54 2003/0059666 A1 Kourtakis 03-27-2003 55 2004/0142230 A1 Haugen et al. 07-22-2004

Examiner Date /Alexander Holyansky/ (08/05/2009) Signature Considered

Foreign Patent Document

FOREIGN PATENT DOCUMENTS

Name of Patentee or Applicant

Date of Publication

56

Cite

Examiner

ŧ.

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup>Applicant is to place a check mark here if English Translation is attached or place an "A" here if English language abstract is attached.

Receipt date: 07/24/2006

eceipi dai	e: 07/24	1/2006			10000010 - GAU: 410		
PTO/SB/0	)8A			Complete if Known			
				Application Number	10/568,516		
INFORMATION DISCLOSURE				Filing Date	02-15-2006		
STATEMENT BY APPLICANT			ICANT	Confirmation Number	1180		
	(use as many sheets as necessary)			First Named Inventor	Daniel M. Giaquinta		
(use as				Group Art Unit			
				Examiner Name	Not Yet Assigned		
Sheet	3	of	5	Attorney Docket No.	HNDA 2023. 1		
				·	(2003-052)		

Initials	No.1	Office	Number <sup>4</sup>	Kind Code (if known)	of Cited Document	of Cited Document MM-DD-YYYY	T⁵
	57	BE	895 174	Α	Johnson Matthey PLC	05-30-1983	
	58	EP	0355853	A2	N.E. Chemcat Corp.	02-28-1990	
	59	EP	0386764	A2	N.E. Chemcat Corp.	09-12-1990	
	60	EP	0469514	A2	N.E. Chemcat Corp.	09-05-1992	
	61	EP	0552587	A1	Stonehart et al.	07-28-1993	
	62	EP	0827225	A2	N.E. Chemcat Corp.	03-04-1998	
	63	EP	0838872	A3	Gunner et al.	04-29-1998	
	64	EP	0855449	A1	Mitsubishi Materials Corp.	07-29-1998	
	65	EP	0858987	B1	Amariglio et al.	08-19-1998	
	66	EP	1080435	B1	Lacy et al.	03-07-2001	
	67	GB	1363888		United Aircraft Corp.	08-21-1974	Α
	68	GB	2 029 857	Α	Johnson Matthey Co Ltd.	03-26-1980	
	69	GB	2 033 925	Α	Johnson Matthey Co Ltd.	05-29-1980	
	70	JP	2003-80085	i	Sony Corp.	03-18-2003	A√
	71	JP	01 021030	Α	Nippon Mining Co Ltd.	01-24-1989	Α
	72	JP	2001 294959	Α	Mitsubishi Heavy Ind Ltd.	10-26-2001	
	73	JP	2002-289208		Matsushita Electric Ind. Co.	10-04-2002	Α
	74	JP	2003-331855		Tokyo Inst. of Technol	11-21-2003	Α
	75	JP	08 100255	Α	Mitsubishi Materials Corp.	04-16-1996	Α
	76	JP	07 050008	Α	Showa Denko KK	02-21-1995	Α
	77	JP	06 007679	Α	Tanaka Kikinzoku Kogyo KK	01-18-1994	A√
	78	JP	06 065601	Α	Mitsubishi Materials Corp.	03-08-1994	Α
	79	JP	63 149356	Α	Res Inst Electric Magnetic Alloys	06-22-1988	Α
	80	JP	62 107040	Α	Sumitomo Metal Ind Ltd.	05-18-1987	Α
	81	JP	03 127459	Α	Fuji Electric Co. Ltd.	05-30-1991	Α
	82	JP	04 072029	Α	Mitsubishi Materials Corp.	03-06-1992	Α
	83	JP	04 066635	Α	Mitsubishi Materials Corp.	03-03-1992	Α
	84	JP	04 066632	Α	Mitsubishi Materials Corp.	03-03-1992	Α

Examiner Signature	/Alexander Polyansky/ (08/05/2009)	Date Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>8</sup>Applicant is to place a check mark here if English Translation is attached or place an 'A' here if English language abstract is attached.

ceipt da		24/2006				10	0568516 - GAU:	41	
PTO/SB/0	)8A				Complete if	Knov	vn		
			Application	Application Number 10/568,516		68,516			
INFORMATION DISCLOSURE			Filing Da	Filing Date		02-15-2006			
STAT	EMENT	BY APP	LICANT	Confirma	tion Number	1180	)		
				First Nan	ned Inventor	Dani	iel M. Giaquinta		
(use as	many sh	eets as r	necessary)	Group A	t Unit				
				Examine		Not	Yet Assigned	_	
Sheet	4	of	5	Attorney	Attorney Docket No.		OA 2023. 1		
						(200	3-052)		
	85	wo	99/16137		Narayanan et al.		04-01-1999		
	86	wo	00/35037	A1	Johnson Matthey PLC		06-15-2000		
	87	wo	02/22901	A1	Cannon Muskegon Corp	,	03-21-2002		
	1 0,				T LITERATURE DOCU		S		
Examiner	Cite				AL LETTERS), title of the ar			Г	
Initials	No.1	of the ite			serial, symposium, catalog,			T <sup>6</sup>	
					isher, city and/or country wh	ere pub	olished	_	
	88	CHU, D. et al. – <i>J. Electrochem.</i> Soc. 1996, 143, 1685						<u> </u>	
	89				tals Review, Vol. 26, No. 4			_	
	90			Korean Jou	mal of Materials Research	, Vol.	12, No. 12, 2002,		
		pp. 897-903  EPRON, "Influence of Oxidizing and Reducing Treatments on the Metal-Metal							
	91								
		Interactions and on the Activity for Nitrate Reduction of a Pt-Cu Bimetallic Catalyst" Applied Catalysis, 2002, pp. 253-261							
	92	RALPH, T.R. et al., "Catalysts for Low Temperature Fuel Cells Part 1: The Cathode							
	"-	Challenges", Platinum Metals Rev., 2002, 46, (1), pp. 3-14							
	93	SCHMIDT et al., "Rotating Disk Electrode Measurements on the CO Tolerance of a							
		High-Surface Area Pt/Vulcan Carbon Fuel Cell Electrocatalyst", Journal of the							
		Electrochemical Society, 1999, 146(4), pp. 1296-1304							
	94	SCHMIDT et al., "Characterization of High-Surface-Area Electrocatalysts Using a							
		Rotating Disk Electrode Configuration", Journal of the Electrochemical Society, 1998,							
		145(7), pp. 2354-2358							
	95	STRASSER, P. et al., "Combinatorial Electrochemical Strategies For the Discovery							
		of New Fuel-Cell Electrode Materials, Proceedings of the International Symposium						1	
	1	on Fuel Cells for Vehicles, 41st Battery Symposium", The Electrochemical Society of Japan, Nagoya 2000, pp. 34-35							
	96	STRASSER, P. et al., "Combinatorial Electrochemical Techniques for the Discovery						✝	
	"				als", Direct Methanol Fuel				
					ol. 2001-4, New Jersey, Z				
	1	191-208		•				_	
	97								
					ger Thin Films by Plasma	Polym	nerization", Ber.		
	1				4, 1994, pp. 631-635.				
	98	Internati	onal Search F	Report for Ap	oplication No. PCT/US200	4/0268	347 dated		

Examiner		Date	
Signature	/Alexander Polyansky/ (08/05/2009)	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

June 10, 2005, 7 pages

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup>Applicant is to place a check mark here if English Translation is attached or place an \*A\* here if English language abstract is attached.